



AimValley is a world class engineering and innovation center that designs and builds networking solutions. We are based in Hilversum, with a strong presence in the USA and India. We started in 2003 as a spin-off from Lucent Technologies (a successor from the American company AT&T), that is why we have a strong background in telecommunication solutions and have build-up vast expertise in real-time processor techniques. Most of our design & development is done in-house.

Product development entails preparation of requirement documents, specification of system architecture, electronic development (block diagrams, board design, system certification, mechanical design), FPGA/ASIC development, software development, system verification and product/factory introduction. AimValley makes use of FPGAs to process high speed transmission functions. Real-time requirements are also key in our software development.

Our business is about people and our teams are dynamic, skilled and passionate about technique. Recruiting and training the right talent is an essential part of the AimValley DNA. We have over 80 employees of which 75% works as design expert in the R&D organization. All R&D employees have a college or university level education.



Project Introduction - AimOS Built-in Self-Test

AimOS is based on an infrastructure abstraction layer, containing components such as mutexes, semaphore, message queues, threads, timers, etc.

The abstraction layer ensures that AimOS can function on various operating systems and hardware.

Project Description

Currently missing in the abstraction layer is a built-in self-test, that enables a quicker way of testing and verifying if the port to an embedded system works according to specification. The tests must include performance and performance limitation test as the embedded application requires a certain performance level.

Next to a self-test it is also required to verify that with code-coverage, sufficient code is covered.



Complexity

The complexity of this project lies within the following:

- > Understanding the abstraction layer architecture
- > Devise a test strategy that covers all the supported features and limitations.

Keywords for this project

- > Built-in Self-Test
- > Linux
- > Embedded System
- > Object oriented

Affinity

- > C/C++
- > Linux
- > Perl/Python
- > gnu compiler chain

Skills

- > Communicative
- > Independent
- > Competent in English

Are you a student with a can-do attitude and a passion for technology?
AimValley is your company!

Why not join us today: working@aimvalley.com